



- 19 -

BEST AVAILABLE COPY

ABSTRACT

An electronic meter includes a sensing circuit for sensing voltage and current values of a waveform, an analog-to-digital converter for converting the sensed voltage and current values to digital voltage and current values, a digital filter for delaying one or both of the digital voltage and current values to compensate for a phase shift error in the sensing circuit, and a computation circuit for computing one or more parameters of the waveform in response to the phase compensated voltage and current values. The electronic meter may be calibrated by applying to the meter a test waveform having a known phase shift, measuring the phase shift using the electronic meter, determining a phase shift error based on the difference between the known phase shift and the measured phase shift and determining digital filter coefficients to produce a digital filter delay that corresponds to the phase shift error.

15

10